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## SEQUENCE LISTING

&lt;110&gt; ONCOTHERAPY SCIENCE, INC.

JAPAN AS REPRESENTED BY THE PRESIDENT OF THE UNIVERSITY OF TOKYO

&lt;120&gt; METHOD OF DIAGNOSING COLON AND GASTRIC CANCERS

&lt;130&gt; ONC-A0209P

&lt;150&gt; US 60/407,338

&lt;151&gt; 2002-08-30

&lt;160&gt; 129

&lt;170&gt; PatentIn version 3.1

&lt;210&gt; 1

&lt;211&gt; 6462

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1

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Ser Asp Leu Pro Leu Arg Phe Pro Tyr Gly Arg Pro Glu Phe Leu Gly

35 40 45

Leu Ser Gln Asp Glu Val Glu Cys Ser Ala Asp His Ile Ala Arg Pro

50 55 60

Ile Leu Ile Leu Lys Glu Thr Arg Arg Leu Pro Trp Ala Thr Gly Tyr

65 70 75 80



1 1 / 9 3

Ala Glu Val Ile Asn Ala Gly Lys Ser Thr His Asn Glu Asp Gln Ala

85

90

95

Ser Cys Glu Val Leu Thr Val Lys Lys Lys Ala Gly Ala Val Thr Ser

100

105

110

Thr Pro Asn Arg Asn Ser Ser Lys Arg Arg Ser Ser Leu Pro Asn Gly

115

120

125

Glu Gly Leu Gln Leu Lys Glu Asn Ser Glu Ser Glu Gly Val Ser Cys

130

135

140

His Tyr Trp Ser Leu Phe Asp Gly His Ala Gly Ser Gly Ala Ala Val

145

150

155

160

Val Ala Ser Arg Leu Leu Gln His His Ile Thr Glu Gln Leu Gln Asp

165

170

175

Ile Val Asp Ile Leu Lys Asn Ser Ala Val Leu Pro Pro Thr Cys Leu

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190

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205

Ala Ala Ser Leu Arg Gly Gly Val Gly Ala Pro Gly Ser Pro Ser Thr

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215

220



1 2 / 9 3

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Val Ile Gly Ala Leu Glu Ser Ala Phe Lys Glu Met Asp Leu Gln Ile  
245 250 255

Glu Arg Glu Arg Ser Ser Tyr Asn Ile Ser Gly Gly Cys Thr Ala Leu  
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Ile Val Ile Cys Leu Leu Gly Lys Leu Tyr Val Ala Asn Ala Gly Asp  
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1 3 / 9 3

355

360

365

Lys Phe Pro Leu Ile Tyr Gly Glu Gly Lys Lys Ala Arg Val Met Ala

370

375

380

Thr Ile Gly Val Thr Arg Gly Leu Gly Asp His Asp Leu Lys Val His

385

390

395

400

Asp Ser Asn Ile Tyr Ile Lys Pro Phe Leu Ser Ser Ala Pro Glu Val

405

410

415

Arg Ile Tyr Asp Leu Ser Lys Tyr Asp His Gly Ser Asp Asp Val Leu

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425

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Ile Leu Ala Thr Asp Gly Leu Trp Asp Val Leu Ser Asn Glu Glu Val

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440

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Ala Glu Ala Ile Thr Gln Phe Leu Pro Asn Cys Asp Pro Asp Asp Pro

450

455

460

His Arg Tyr Thr Leu Ala Ala Gln Asp Leu Val Met Arg Ala Arg Gly

465

470

475

480

Val Leu Lys Asp Arg Gly Trp Arg Ile Ser Asn Asp Arg Leu Gly Ser

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490

495



1 4 / 9 3

Gly Asp Asp Ile Ser Val Tyr Val Ile Pro Leu Ile His Gly Asn Lys

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Leu Ser

&lt;210&gt; 3

&lt;211&gt; 1634

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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<212> PRT

<213> Homo sapiens

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15



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Pro Gly Glu Ala Ala Thr Ser Pro Ala Glu Glu Thr Val Val Trp Ser

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30

Pro Glu Val Glu Val Cys Leu Phe His Ala Met Leu Gly His Lys Pro

35

40

45

Val Gly Val Asn Arg His Phe His Met Ile Cys Ile Arg Asp Lys Phe

50

55

60

Ser Gln Asn Ile Gly Arg Gln Val Pro Ser Lys Val Ile Trp Asp His

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70

75

80

Leu Ser Thr Met Tyr Asp Met Gln Ala Leu His Glu Ser Glu Ile Leu

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90

95

Pro Phe Pro Asn Pro Glu Arg Asn Phe Val Leu Pro Glu Glu Ile Ile

100

105

110

Gln Glu Val Arg Glu Gly Lys Val Met Ile Glu Glu Glu Met Lys Glu

115

120

125

Glu Met Lys Glu Asp Val Asp Pro His Asn Gly Ala Asp Asp Val Phe

130

135

140

Ser Ser Ser Gly Ser Leu Gly Lys Ala Ser Glu Lys Ser Ser Lys Asp



1 8 / 9 3

145 150 155 160

Lys Glu Lys Asn Ser Ser Asp Leu Gly Cys Lys Glu Gly Ala Asp Lys

165 170 175

Arg Lys Arg Ser Arg Val Thr Asp Lys Val Leu Thr Ala Asn Ser Asn

180 185 190

Pro Ser Ser Pro Ser Ala Ala Lys Arg Arg Arg Thr

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&lt;210&gt; 5

&lt;211&gt; 1681

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19 / 93

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&lt;211&gt; 413

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6

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Gly Leu Val Ser Glu Val Leu Leu Trp Leu Val Lys Arg Tyr Glu Pro

35 40 45

Gln Thr Asp Ile Pro Pro Asp Val Asp Thr Glu Gln Asp Arg Val Phe

50 55 60

Phe Ile Lys Ala Ile Ala Gln Phe Met Ala Thr Lys Ala His Ile Lys

65 70 75 80

Leu Asn Thr Lys Lys Leu Tyr Gln Ala Asp Gly Tyr Ala Val Lys Glu

85 90 95

Leu Leu Lys Ile Thr Ser Val Leu Tyr Asn Ala Met Lys Thr Lys Gly

100 105 110



2 2 / 9 3

Met Glu Gly Ser Glu Ile Val Glu Glu Asp Val Asn Lys Phe Lys Phe

115

120

125

Asp Leu Gly Ser Lys Ile Ala Asp Leu Lys Ala Ala Arg Gln Leu Ala

130

135

140

Ser Glu Ile Thr Ser Lys Gly Ala Ser Leu Tyr Asp Leu Leu Gly Met

145

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155

160

Glu Val Glu Leu Arg Glu Met Arg Thr Glu Ala Ile Ala Arg Pro Leu

165

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175

Glu Ile Asn Glu Thr Glu Lys Val Met Arg Ile Ala Ile Lys Glu Ile

180

185

190

Leu Thr Gln Val Gln Lys Thr Lys Asp Leu Leu Asn Asn Val Ala Ser

195

200

205

Asp Glu Ala Asn Leu Glu Ala Lys Ile Glu Lys Arg Lys Leu Glu Leu

210

215

220

Glu Arg Asn Arg Lys Arg Leu Glu Thr Leu Gln Ser Val Arg Pro Cys

225

230

235

240

Phe Met Asp Glu Tyr Glu Lys Thr Glu Glu Glu Leu Gln Lys Gln Tyr

245

250

255



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Asp Thr Tyr Leu Glu Lys Phe Gln Asn Leu Thr Tyr Leu Glu Gln Gln

260

265

270

Leu Glu Asp His His Arg Met Glu Gln Glu Arg Phe Glu Glu Ala Lys

275

280

285

Asn Thr Leu Cys Leu Ile Gln Asn Lys Leu Lys Glu Glu Glu Lys Arg

290

295

300

Leu Leu Lys Ser Gly Ser Asn Asp Asp Ser Asp Ile Asp Ile Gln Glu

305

310

315

320

Asp Asp Glu Ser Asp Ser Glu Leu Glu Glu Arg Arg Leu Pro Lys Pro

325

330

335

Gln Thr Ala Met Glu Met Leu Met Gln Gly Arg Pro Gly Lys Arg Ile

340

345

350

Val Gly Thr Met Gln Gly Gly Asp Ser Asp Asp Asn Glu Asp Ser Glu

355

360

365

Glu Ser Glu Ile Asp Met Glu Asp Asp Asp Asp Glu Asp Asp Asp Leu

370

375

380

Glu Asp Glu Ser Ile Ser Leu Ser Pro Thr Lys Pro Asn Arg Arg Val



2 4 / 9 3

385

390

395

400

Arg Lys Ser Glu Pro Leu Asp Glu Ser Asp Asn Asp Phe

405

410

&lt;210&gt; 7

&lt;211&gt; 733

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 7

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gactatcacc aaagagagag actactgcgc ggaagaccag actatcgaga gctggagaga 360

agaaggtttc ccagtgggct tgaagcttgc tgtgcttggt attttcatca ttgtggtgtt 420



25 / 93

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ggtgtctggg ctcagccagg tggaaggaac ctgcctaacc aggcacctgt gttaagagca 660

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gcaggcgtca aac 733

<210> 8

<211> 29

<212> PRT

<213> Homo sapiens

<400> 8

Met Val Asp Val Lys Cys Leu Ser Asp Cys Lys Leu Gln Asn Gln Leu

1 5 10 15

Glu Lys Leu Gly Phe Ser Pro Gly Pro Ile Leu Leu Ala

20 25



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&lt;210&gt; 9

&lt;211&gt; 656

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 9

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ctgagtgact gtaaattgca gaaccaactt gagaagcttg gattttcacc tggccaata	180
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cctgcttcag gaaagaacca aaacactacc ctgaagggcc agcctagcct gcagccctcc	480
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agggtggaagg aacctgccta accaggcacc tgtgttaaga gcatgatggt taggaaatcc	600



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cccaagtcac gtcaactctc attaaaggtg cttccatatt tgagcaggcg tcaaac 656

<210> 10

<211> 67

<212> PRT

<213> Homo sapiens

<400> 10

Met Val Asp Val Lys Cys Leu Ser Asp Cys Lys Leu Gln Asn Gln Leu

1 5 10 15

Glu Lys Leu Gly Phe Ser Pro Gly Pro Ile Leu Arg Gly Leu Gln Glu

20 25 30

His Gln Ala Pro Glu Ser His Met Gly Leu Ser Pro Lys Arg Glu Thr

35 40 45

Thr Ala Arg Lys Thr Arg Leu Ser Arg Ala Gly Glu Lys Lys Val Ser

50 55 60

Gln Trp Ala

65

<210> 11



28 / 93

&lt;211&gt; 3707

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 11

cgcgggcggg ggcttctggg agttgtagtc tgttgggggc gtgcgcagtc gggatggaag 60

cttcctggcg ccaggtggcc ggtggccgag gccgatcccg gggacgggcc actgccgccc 120

cctcaggaaa tggagtcctat ctccgcggcg ccggaggagg gcgagagaag gggtcggttg 180

gcgcagttcc ttctggcacc agtcccggag gagtcgcgac cacggcggct gcaggagca 240

ggcacagccc cgcaggatcc caagccctgc agactaccgc agccagcgag ctaatgtctc 300

agaaaaaatt tgaagaaatc aagaaagcta accaagctgc agccagaaaa ctigtgaag 360

aacagtttag ctcttcatct gaagaaggag atgaagattt tgaaggaaaa cagggaataa 420

tacttgcaaa tacgtttata acatacacta ctacagaca tggagataca cgtgaattag 480

agcgaacaaa acaatatgta aatgaagctt ttcaagcagg ggctatgaca tgcctaattt 540

gtattgcttc ggtgaagaga aaccaagcag ttgagagctg ttcgggatgt ttctgtatat 600

ttcacatgcc ctgtatccag aagtgggcta aagacagcca gtttcttgta tcttctgtga 660



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ctgatgatga ttttggaag aaagattgtc cctggccttg tccaaaatgt aggtttgaat 720

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ctttagatcc gtggcttgtg cctcattcat gtggccaagt atgtgagcgt gaatttaaac 840

ctccttgtgg ccataaatgt ttactcctct gtcaccagg tccctgccct ccttgcctaa 900

agatgggtcac aactacttgt tactgtgaaga aagcaaaacc tatccctcgt aggtgcagtg 960

ccaaggaatg gtcttgtcag ctgccatgtg gacagaagtt gctttgtggg caacataagt 1020

gtgaaaatcc ttgtcatgca ggaagctgtc agccttgtcc aagagttagt agacaaaagt 1080

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gtgcttgtgg agaatgtcct cgatctggga aaaggttctg tccatgtcag aaatcaaagt 1260

tttctttgcc ttgtacagaa gatgtaccaa cttgtggaga cagttgtgac aaagtacttg 1320

aatgcggaat ccatagatgt tcacagcgtt gtcaccgagg tccctgtgaa acatgtagac 1380

aagaagtgga aaagcattgt cgctgtggaa agcatacaaa acgaatgcct tgtcataaac 1440



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cttatctgtg tgaaactaag tgtgttaaga tgcgtgactg tcagaagcat caatgtagaa 1500

gaaagtgttg ccctggaaac tgtccacctt gtgatcaaaa ctgtggacgg actttaggat 1560

gtagaaacca taagtgtcca tctgtctgtc acagaggcag ttgctatccc tgcccagaaa 1620

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taaagcagac tggcaggcac cagcctacag gcccttggga acagccttct gagccagcat 1920

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aagggtgctc caagtcacgg ccactaggtt gtcttcaccc atgtattttg cgaatgcacc 2220



31 / 93

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gcctgtatgt ggaatgtaga aaaataacca cagctgatgt aaatgaaaag aacctcctca 2340

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3 2 / 9 3

tgaaactaaa atatttcata aggcttagct agaggcagag taacgtgttt ttgttcattg 3060

ggcttccttg tacttagttt tttcatttaa taattcaaac caacactttt aaaaaataat 3120

tcagatgaga ctgagccata tctgcagtaa gagaaatatt tcttaatgtt ttggttactt 3180

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agtgaggaat ttttatcaat aaatgtcatg gggcgtgttc ttcagaatat atagttattt 3360

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3 3 / 9 3

&lt;210&gt; 12

&lt;211&gt; 911

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 12

Met Glu Ala Ser Trp Arg Gln Val Ala Gly Gly Arg Gly Arg Ser Arg

1 5 10 15

Gly Arg Ala Thr Ala Ala Pro Ser Gly Asn Gly Val His Leu Arg Gly

20 25 30

Ala Gly Gly Gly Arg Glu Lys Gly Ser Val Gly Ala Val Pro Ser Gly

35 40 45

Thr Ser Pro Gly Gly Val Ala Thr Thr Ala Ala Ala Gly Ser Arg His

50 55 60

Ser Pro Ala Gly Ser Gln Ala Leu Gln Thr Thr Ala Ala Ser Glu Leu

65 70 75 80

Met Ser Gln Lys Lys Phe Glu Glu Ile Lys Lys Ala Asn Gln Ala Ala

85 90 95

Ala Arg Lys Leu Val Glu Glu Gln Phe Ser Ser Ser Ser Glu Glu Gly

100 105 110



3 4 / 9 3

Asp Glu Asp Phe Glu Gly Lys Gln Gly Lys Ile Leu Ala Asn Thr Phe

115

120

125

Ile Thr Tyr Thr Thr Gln Thr Asp Gly Asp Thr Arg Glu Leu Glu Arg

130

135

140

Thr Lys Gln Tyr Val Asn Glu Ala Phe Gln Ala Gly Ala Met Thr Cys

145

150

155

160

Leu Ile Cys Ile Ala Ser Val Lys Arg Asn Gln Ala Val Trp Ser Cys

165

170

175

Ser Gly Cys Phe Cys Ile Phe His Met Pro Cys Ile Gln Lys Trp Ala

180

185

190

Lys Asp Ser Gln Phe Leu Val Ser Ser Val Thr Asp Asp Asp Phe Gly

195

200

205

Lys Lys Asp Cys Pro Trp Pro Cys Pro Lys Cys Arg Phe Glu Tyr Lys

210

215

220

Arg Ser Glu Thr Pro Ser Arg Tyr Tyr Cys Tyr Cys Gly Lys Val Glu

225

230

235

240

Asp Pro Pro Leu Asp Pro Trp Leu Val Pro His Ser Cys Gly Gln Val



3 5 / 9 3

245

250

255

Cys Glu Arg Glu Phe Lys Pro Pro Cys Gly His Lys Cys Leu Leu Leu

260

265

270

Cys His Pro Gly Pro Cys Pro Pro Cys Pro Lys Met Val Thr Thr Thr

275

280

285

Cys Tyr Cys Lys Lys Ala Lys Pro Ile Pro Arg Arg Cys Ser Ala Lys

290

295

300

Glu Trp Ser Cys Gln Leu Pro Cys Gly Gln Lys Leu Leu Cys Gly Gln

305

310

315

320

His Lys Cys Glu Asn Pro Cys His Ala Gly Ser Cys Gln Pro Cys Pro

325

330

335

Arg Val Ser Arg Gln Lys Cys Val Cys Gly Lys Lys Val Ala Glu Arg

340

345

350

Ser Cys Ala Ser Pro Leu Trp His Cys Asp Gln Val Cys Gly Lys Thr

355

360

365

Leu Pro Cys Gly Asn His Thr Cys Glu Gln Val Cys His Val Gly Ala

370

375

380



3 6 / 9 3

Cys Gly Glu Cys Pro Arg Ser Gly Lys Arg Phe Cys Pro Cys Gln Lys  
385 390 395 400

Ser Lys Phe Ser Leu Pro Cys Thr Glu Asp Val Pro Thr Cys Gly Asp  
405 410 415

Ser Cys Asp Lys Val Leu Glu Cys Gly Ile His Arg Cys Ser Gln Arg  
420 425 430

Cys His Arg Gly Pro Cys Glu Thr Cys Arg Gln Glu Val Glu Lys His  
435 440 445

Cys Arg Cys Gly Lys His Thr Lys Arg Met Pro Cys His Lys Pro Tyr  
450 455 460

Leu Cys Glu Thr Lys Cys Val Lys Met Arg Asp Cys Gln Lys His Gln  
465 470 475 480

Cys Arg Arg Lys Cys Cys Pro Gly Asn Cys Pro Pro Cys Asp Gln Asn  
485 490 495

Cys Gly Arg Thr Leu Gly Cys Arg Asn His Lys Cys Pro Ser Val Cys  
500 505 510

His Arg Gly Ser Cys Tyr Pro Cys Pro Glu Thr Val Asp Val Lys Cys  
515 520 525



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Asn Cys Gly Asn Thr Lys Val Thr Val Pro Cys Gly Arg Glu Arg Thr

530

535

540

Thr Arg Pro Pro Lys Cys Lys Glu Gln Cys Ser Arg Pro Pro Thr Cys

545

550

555

560

His His Thr Ser Gln Glu Lys His Arg Cys His Phe Gly Ser Cys Pro

565

570

575

Pro Cys His Gln Pro Cys Gln Lys Val Leu Glu Lys Cys Gly His Leu

580

585

590

Cys Pro Ala Pro Cys His Asp Gln Ala Leu Ile Lys Gln Thr Gly Arg

595

600

605

His Gln Pro Thr Gly Pro Trp Glu Gln Pro Ser Glu Pro Ala Phe Ile

610

615

620

Gln Thr Ala Leu Pro Cys Pro Pro Cys Gln Val Pro Ile Pro Met Glu

625

630

635

640

Cys Leu Gly Lys His Glu Val Ser Pro Leu Pro Cys His Ala Val Gly

645

650

655

Pro Tyr Ser Cys Lys Arg Val Cys Gly Arg Ile Leu Asp Cys Gln Asn



3 8 / 9 3

660

665

670

His Thr Cys Met Lys Glu Cys His Lys Val Thr Lys Thr Asp Gly Cys

675

680

685

Thr Gly Lys Asn Lys Ala Gly Pro Glu Cys Leu His Cys Glu Glu Gly

690

695

700

Cys Ser Lys Ser Arg Pro Leu Gly Cys Leu His Pro Cys Ile Leu Arg

705

710

715

720

Cys His Pro Gly Glu Cys Pro Pro Cys Val Gln Met Leu Arg Ile Lys

725

730

735

Cys His Cys Lys Ile Thr Ser Leu Tyr Val Glu Cys Arg Lys Ile Thr

740

745

750

Thr Ala Asp Val Asn Glu Lys Asn Leu Leu Ser Cys Cys Lys Asn Gln

755

760

765

Cys Pro Lys Glu Leu Pro Cys Gly His Arg Cys Lys Glu Met Cys His

770

775

780

Pro Gly Glu Cys Pro Phe Asn Cys Asn Gln Lys Val Lys Leu Arg Cys

785

790

795

800



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Pro Cys Lys Arg Ile Lys Lys Glu Leu Gln Cys Asn Lys Val Arg Glu

805

810

815

Asn Gln Val Ser Ile Glu Cys Asp Thr Thr Cys Lys Glu Met Lys Arg

820

825

830

Lys Ala Ser Glu Ile Lys Glu Ala Glu Ala Lys Ala Ala Leu Glu Glu

835

840

845

Glu Lys Arg Arg Gln Gln Ala Glu Leu Glu Ala Phe Glu Asn Arg Leu

850

855

860

Lys Gly Arg Arg Lys Lys Asn Arg Lys Arg Asp Glu Val Ala Val Glu

865

870

875

880

Leu Ser Leu Trp Gln Lys His Lys His Tyr Leu Ile Ser Val Cys Gly

885

890

895

Val Val Val Val Val Phe Ala Trp Tyr Ile Thr His Asp Val Asn

900

905

910

&lt;210&gt; 13

&lt;211&gt; 22

&lt;212&gt; DNA

&lt;213&gt; Artificial



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&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 13

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22

&lt;210&gt; 14

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 14

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20

&lt;210&gt; 15

&lt;211&gt; 24

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;



4 1 / 9 3

<223> Artificially synthesized primer sequence for RT-PCR

<400> 15

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24

<210> 16

<211> 21

<212> DNA

<213> Artificial

<220>

<223> Artificially synthesized primer sequence for RT-PCR

<400> 16

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21

<210> 17

<211> 24

<212> DNA

<213> Artificial

<220>

<223> Artificially synthesized primer sequence for RT-PCR



4 2 / 9 3

&lt;400&gt; 17

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24

&lt;210&gt; 18

&lt;211&gt; 22

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 18

catagaccca taagccctgt tg

22

&lt;210&gt; 19

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 19

gtgtgcctct tccacgccat

20



4 3 / 9 3

&lt;210&gt; 20

&lt;211&gt; 21

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 20

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21

&lt;210&gt; 21

&lt;211&gt; 23

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 21

tgtgggtgttt gtctacctga ctg

23



4 4 / 9 3

&lt;210&gt; 22

&lt;211&gt; 23

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 22

accatcatgc tcttaacaca ggt

23

&lt;210&gt; 23

&lt;211&gt; 21

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 23

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21

&lt;210&gt; 24

&lt;211&gt; 21



4 5 / 9 3

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 24

gtcattgtca ctctcatcca g

21

&lt;210&gt; 25

&lt;211&gt; 19

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 25

gaagatcttc ttgccagtg

19

&lt;210&gt; 26

&lt;211&gt; 17

&lt;212&gt; DNA

&lt;213&gt; Artificial



4 6 / 9 3

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 26

gcagcaggct cagctgc

17

&lt;210&gt; 27

&lt;211&gt; 21

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 27

cttgttgatg tgggtcacac g

21

&lt;210&gt; 28

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;



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<223> Artificially synthesized primer sequence for RT-PCR

<400> 28

tgtggagctt agggaggcag

20

<210> 29

<211> 20

<212> DNA

<213> Artificial

<220>

<223> Artificially synthesized primer sequence for RT-PCR

<400> 29

ctatggctac ttacggagcg

20

<210> 30

<211> 20

<212> DNA

<213> Artificial

<220>

<223> Artificially synthesized primer sequence for RT-PCR



48 / 93

&lt;400&gt; 30

tccttggcag caccattcac

20

&lt;210&gt; 31

&lt;211&gt; 29

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 31

ggcgaattcg taatatgctc actcgagtg

29

&lt;210&gt; 32

&lt;211&gt; 25

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 32

ccaggatcct gacagcttgt ttcca

25



49 / 93

&lt;210&gt; 33

&lt;211&gt; 26

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 33

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26

&lt;210&gt; 34

&lt;211&gt; 25

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 34

tgcgaattcg ggatggaagc ttcct

25



5 0 / 9 3

&lt;210&gt; 35

&lt;211&gt; 25

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 35

gataattcctt tttttaattg acatc

25

&lt;210&gt; 36

&lt;211&gt; 26

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 36

cttgtaccat tgacatcatg ggtgat

26

&lt;210&gt; 37

&lt;211&gt; 23



5 1 / 9 3

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 37

tgtgaattcg ccatgggaga ggc

23

&lt;210&gt; 38

&lt;211&gt; 24

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 38

taactcgagc gtgcggcgcc gctt

24

&lt;210&gt; 39

&lt;211&gt; 24

&lt;212&gt; DNA

&lt;213&gt; Artificial



5 2 / 9 3

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 39

taaggatccc gtgcggcgcc gctt

24

&lt;210&gt; 40

&lt;211&gt; 32

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 40

tctgaattca gaaaagaggc caaacttcta tc

32

&lt;210&gt; 41

&lt;211&gt; 33

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;



5 3 / 9 3

<223> Artificially synthesized primer sequence for RT-PCR

<400> 41

tccgatatca ggtagacaaa caccacaatg atg

33

<210> 42

<211> 30

<212> DNA

<213> Artificial

<220>

<223> Artificially synthesized primer sequence for RT-PCR

<400> 42

gaggaattcc gaccctgggc tcctggggac

30

<210> 43

<211> 32

<212> DNA

<213> Artificial

<220>

<223> Artificially synthesized primer sequence for RT-PCR



5 4 / 9 3

&lt;400&gt; 43

aagctcgaga agtcattgtc actctcatcc ag

32

&lt;210&gt; 44

&lt;211&gt; 30

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 44

acggaattcc tctccagaat gaagatcttc

30

&lt;210&gt; 45

&lt;211&gt; 28

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 45

tctctcgagt caggggcca accgcagc

28



5 5 / 9 3

&lt;210&gt; 46

&lt;211&gt; 29

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 46

cggctcgagc gcatggctta gggacgctc

29

&lt;210&gt; 47

&lt;211&gt; 30

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 47

tggggatccg ctctatgtct ggtagaagtg

30



5 6 / 9 3

&lt;210&gt; 48

&lt;211&gt; 28

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 48

ctgaattcgg agcgatgaag atggtcgc

28

&lt;210&gt; 49

&lt;211&gt; 28

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 49

aagctcgagg cagacacgta aggtggcg

28

&lt;210&gt; 50

&lt;211&gt; 16



57/93

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 50

gtgagcatat tactcc

16

&lt;210&gt; 51

&lt;211&gt; 16

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 51

cctcattata cgagtg

16

&lt;210&gt; 52

&lt;211&gt; 18

&lt;212&gt; DNA

&lt;213&gt; Artificial



58 / 93

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 52

ggccaggac aatctttc

18

&lt;210&gt; 53

&lt;211&gt; 18

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 53

ctttctaaca gggaccgg

18

&lt;210&gt; 54

&lt;211&gt; 18

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;



59 / 93

<223> Artificially synthesized S-oligonucleotide

<400> 54

gcccacctcg gcctctcc

18

<210> 55

<211> 18

<212> DNA

<213> Artificial

<220>

<223> Artificially synthesized S-oligonucleotide

<400> 55

cctctccggc tccaccgc

18

<210> 56

<211> 18

<212> DNA

<213> Artificial

<220>

<223> Artificially synthesized S-oligonucleotide



6 0 / 9 3

&lt;400&gt; 56

cacctcggcc tctcccat

18

&lt;210&gt; 57

&lt;211&gt; 18

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 57

taccctctcc ggctccac

18

&lt;210&gt; 58

&lt;211&gt; 18

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 58

atccaccatg atgataga

18



6 1 / 9 3

&lt;210&gt; 59

&lt;211&gt; 18

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 59

agatagtagt accaccta

18

&lt;210&gt; 60

&lt;211&gt; 18

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 60

acacttcaca tccaccat

18



6 2 / 9 3

&lt;210&gt; 61

&lt;211&gt; 18

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 61

taccacctac acttcaca

18

&lt;210&gt; 62

&lt;211&gt; 18

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 62

cagacacttc acatccac

18

&lt;210&gt; 63

&lt;211&gt; 18



63 / 93

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 63

cacctacact tcacagac

18

&lt;210&gt; 64

&lt;211&gt; 18

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 64

catgatgata gaagtttg

18

&lt;210&gt; 65

&lt;211&gt; 18

&lt;212&gt; DNA

&lt;213&gt; Artificial



6 4 / 9 3

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 65

gtttgaagat agtagtac

18

&lt;210&gt; 66

&lt;211&gt; 18

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 66

acatccacca tgatgata

18

&lt;210&gt; 67

&lt;211&gt; 18

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;



6 5 / 9 3

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 67

atagtagtac cacctaca

18

&lt;210&gt; 68

&lt;211&gt; 16

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 68

cggaggtcgc ggaaag

16

&lt;210&gt; 69

&lt;211&gt; 16

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide



6 6 / 9 3

&lt;400&gt; 69

ctttccgcga cctccg

16

&lt;210&gt; 70

&lt;211&gt; 16

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 70

atcttcattc tggaga

16

&lt;210&gt; 71

&lt;211&gt; 16

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 71

tctccagaat gaagat

16



6 7 / 9 3

&lt;210&gt; 72

&lt;211&gt; 16

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 72

gaagatcttc attctg

16

&lt;210&gt; 73

&lt;211&gt; 16

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 73

cagaatgaag atcttc

16



6 8 / 9 3

&lt;210&gt; 74

&lt;211&gt; 16

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 74

gcggccggct tggagt

16

&lt;210&gt; 75

&lt;211&gt; 16

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 75

actccaagcc ggccgc

16

&lt;210&gt; 76

&lt;211&gt; 16



6 9 / 9 3

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 76

gtagaagtgg tggtaa

16

&lt;210&gt; 77

&lt;211&gt; 16

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 77

ttaccaccac ttctac

16

&lt;210&gt; 78

&lt;211&gt; 16

&lt;212&gt; DNA

&lt;213&gt; Artificial



70 / 93

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 78

gtgagcgcg cgcgcc

16

&lt;210&gt; 79

&lt;211&gt; 16

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 79

ggcgcgccgc gctcac

16

&lt;210&gt; 80

&lt;211&gt; 16

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;



7 1 / 9 3

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 80

gcgcggccgc gctcac

16

&lt;210&gt; 81

&lt;211&gt; 16

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized S-oligonucleotide

&lt;400&gt; 81

cactcgcgcc gcgcgg

16

&lt;210&gt; 82

&lt;211&gt; 33

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR



7 2 / 9 3

&lt;400&gt; 82

ggcgaattcg taatatgctc actcgagtga aat

33

&lt;210&gt; 83

&lt;211&gt; 23

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 83

gttgaattcc gtgttctcag gct

23

&lt;210&gt; 84

&lt;211&gt; 26

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 84

gcggaattcc tgctgcagca ccacat

26



7 3 / 9 3

&lt;210&gt; 85

&lt;211&gt; 26

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 85

acagcggccg ctttcatgac agcttg

26

&lt;210&gt; 86

&lt;211&gt; 23

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 86

acagaattcg ggatggaagc ttc

23



7 4 / 9 3

&lt;210&gt; 87

&lt;211&gt; 30

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 87

atactcgaga ggaggtttta attcacgctc

30

&lt;210&gt; 88

&lt;211&gt; 30

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 88

cacgaattca aggtaaaact tagatgtcct

30

&lt;210&gt; 89

&lt;211&gt; 33



7 5 / 9 3

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 89

gagctcgagt ttatgttttt gccatagtga tag

33

&lt;210&gt; 90

&lt;211&gt; 23

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 90

tgtgaattcg ccatgggaga ggc

23

&lt;210&gt; 91

&lt;211&gt; 24

&lt;212&gt; DNA

&lt;213&gt; Artificial



7 6 / 9 3

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 91

taaggatccc gtgcggcgcc gctt

24

&lt;210&gt; 92

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 92

catgaattcc ggccatggcg

20

&lt;210&gt; 93

&lt;211&gt; 23

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;



77 / 93

<223> Artificially synthesized primer sequence for RT-PCR

<400> 93

catctcgagt caggtctggg etc

23

<210> 94

<211> 22

<212> DNA

<213> Artificial

<220>

<223> Artificially synthesized primer sequence for RT-PCR

<400> 94

tggtagccaa gtgcaggtta ta

22

<210> 95

<211> 22

<212> DNA

<213> Artificial

<220>

<223> Artificially synthesized primer sequence for RT-PCR



7 8 / 9 3

&lt;400&gt; 95

ccaaagggtt tctgcagttt ca

22

&lt;210&gt; 96

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 96

ggggatcagc gtttgagtaa

20

&lt;210&gt; 97

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 97

taggccccac ctccttctat

20



7 9 / 9 3

&lt;210&gt; 98

&lt;211&gt; 30

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 98

tgcggatcca gagcagattg tactgagagt

30

&lt;210&gt; 99

&lt;211&gt; 29

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 99

ctctatctcg agtgaggcgg aaagaacca

29



80 / 93

&lt;210&gt; 100

&lt;211&gt; 47

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 100

tttaagcttg aagaccattt ttggaaaaa aaaaaaaaaa aaaaaac

47

&lt;210&gt; 101

&lt;211&gt; 34

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 101

tttaagcttg aagacatggg aaagagtggc ctca

34

&lt;210&gt; 102

&lt;211&gt; 40



81 / 93

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 102

tttaagcttg aagactatTT ttacatcagg ttgtttttct

40

&lt;210&gt; 103

&lt;211&gt; 37

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized primer sequence for RT-PCR

&lt;400&gt; 103

tttaagcttg aagacacggt gtttcgtcct ttccaca

37

&lt;210&gt; 104

&lt;211&gt; 51

&lt;212&gt; DNA

&lt;213&gt; Artificial



8 2 / 9 3

&lt;220&gt;

&lt;223&gt; Artificially synthesized oligonucleotide sequence for Si-RNA

&lt;400&gt; 104

caccgaagca gcacgacttc ttcttcaaga gagaagaagt cgtgctgctt c 51

&lt;210&gt; 105

&lt;211&gt; 51

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized oligonucleotide sequence for Si-RNA

&lt;400&gt; 105

aaaagaagca gcacgacttc ttctctcttg aagaagaagt cgtgctgctt c 51

&lt;210&gt; 106

&lt;211&gt; 51

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;



8 3 / 9 3

<223> Artificially synthesized oligonucleotide sequence for Si-RNA

<400> 106

caccagaaag attgtccctg gccttcaaga gaggccaggg acaatctttc t 51

<210> 107

<211> 51

<212> DNA

<213> Artificial

<220>

<223> Artificially synthesized oligonucleotide sequence for Si-RNA

<400> 107

aaaaagaaag attgtccctg gcctctcttg aaggccaggg acaatctttc t 51

<210> 108

<211> 51

<212> DNA

<213> Artificial

<220>

<223> Artificially synthesized oligonucleotide sequence for Si-RNA



8 4 / 9 3

&lt;400&gt; 108

caccggagat gaagattttg aagttcaaga gacttcaaaa tcttcatctc c 51

&lt;210&gt; 109

&lt;211&gt; 51

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized oligonucleotide sequence for Si-RNA

&lt;400&gt; 109

aaaaggagat gaagattttg aagtctcttg aacttcaaaa tcttcatctc c 51

&lt;210&gt; 110

&lt;211&gt; 51

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized oligonucleotide sequence for Si-RNA

&lt;400&gt; 110

caccgaagaa caggaaaaga gatttcaaga gaatctcttt tcctgttctt c 51



85 / 93

&lt;210&gt; 111

&lt;211&gt; 51

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized oligonucleotide sequence for Si-RNA

&lt;400&gt; 111

aaaagaagaa caggaaaaga gattctcttg aaatctcttt tcctgttctt c

51

&lt;210&gt; 112

&lt;211&gt; 51

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized oligonucleotide sequence for Si-RNA

&lt;400&gt; 112

caccacagaa ggtaaaactt agattcaaga gatctaagtt ttaccttctg g

51



8 6 / 9 3

&lt;210&gt; 113

&lt;211&gt; 51

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized oligonucleotide sequence for Si-RNA

&lt;400&gt; 113

aaaaccagaa ggtaaaactt agatctcttg aatctaagtt ttaccttctg g 51

&lt;210&gt; 114

&lt;211&gt; 51

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized oligonucleotide sequence for Si-RNA

&lt;400&gt; 114

caccgtatgt gagcgtgaat ttattcaaga gataaattca cgctcacata c 51

&lt;210&gt; 115

&lt;211&gt; 51



8 7 / 9 3

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized oligonucleotide sequence for Si-RNA

&lt;400&gt; 115

aaaagtatgt gagcgtgaat ttatctcttg aataaattca cgctcacata c

51

&lt;210&gt; 116

&lt;211&gt; 51

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized oligonucleotide sequence for Si-RNA

&lt;400&gt; 116

tcccccgaca cttccacatg attttcaaga gaaatcatgt ggaagtgtcg g

51

&lt;210&gt; 117

&lt;211&gt; 51

&lt;212&gt; DNA

&lt;213&gt; Artificial



88 / 93

&lt;220&gt;

&lt;223&gt; Artificially synthesized oligonucleotide sequence for Si-RNA

&lt;400&gt; 117

aaaaccgaca cttccacatg atttctcttg aaaatcatgt ggaagtgtcg g

51

&lt;210&gt; 118

&lt;211&gt; 51

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Artificially synthesized oligonucleotide sequence for Si-RNA

&lt;400&gt; 118

tcccgcgact agagactctg cagttcaaga gactgcagag tctctagtcg c

51

&lt;210&gt; 119

&lt;211&gt; 51

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;



8 9 / 9 3

<223> Artificially synthesized oligonucleotide sequence for Si-RNA

<400> 119

ttttgcgact agagactctg cagtctcttg aactgcagag tctctagtcg c 51

<210> 120

<211> 51

<212> DNA

<213> Artificial

<220>

<223> Artificially synthesized oligonucleotide sequence for Si-RNA

<400> 120

tcccgaccat cataggatgg agcttcaaga gagctccatc ctatgatggt c 51

<210> 121

<211> 51

<212> DNA

<213> Artificial

<220>

<223> Artificially synthesized oligonucleotide sequence for Si-RNA



9 0 / 9 3

&lt;400&gt; 121

ttttgaccat cataggatgg agctctcttg aagctccatc ctatgatggt c

51

&lt;210&gt; 122

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Target sequence for siRNA

&lt;400&gt; 122

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&lt;210&gt; 123

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Target sequence for siRNA

&lt;400&gt; 123

ggagatgaag attttgaagt

20



9 1 / 9 3

&lt;210&gt; 124

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Target sequence for siRNA

&lt;400&gt; 124

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20

&lt;210&gt; 125

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Target sequence for siRNA

&lt;400&gt; 125

ccagaaggta aaacttagat

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9 2 / 9 3

&lt;210&gt; 126

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Target sequence for siRNA

&lt;400&gt; 126

gtatgtgagc gtgaatttat

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&lt;210&gt; 127

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Target sequence for siRNA

&lt;400&gt; 127

ccgacacttc cacatgattt

20

&lt;210&gt; 128

&lt;211&gt; 20



9 3 / 9 3

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Target sequence for siRNA

&lt;400&gt; 128

gcgactagag actctgcagt

20

&lt;210&gt; 129

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Target sequence for siRNA

&lt;400&gt; 129

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